



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/915,736 | 07/26/2001 | Rashid A. Attar | 010032B1 | 1213 |

23696 7590 08/16/2006

QUALCOMM INCORPORATED
5775 MOREHOUSE DR.
SAN DIEGO, CA 92121

EXAMINER

LY, NGHI H

ART UNIT PAPER NUMBER

2617

DATE MAILED: 08/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|-------------------------------------|--|
| Office Action Summary | Application No. 09/915,736 | Applicant(s) ATTAR ET AL. | |
| | Examiner Nghi H. Ly | Art Unit 2617 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 11-23 and 26-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 11-23 and 26-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2617

The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-8, 11-23 and 26-31 have been considered but are moot in view of the new ground(s) of rejection.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-8, 11-23 and 26-31 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-4 of copending Application No. US 10/728,635. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Regarding claims 1, 16 and 31, Attar teaches a method for directing communication between a subscriber station and a plurality of sectors in a data communication system (see claims 1-4), comprising: determining at the subscriber station a forward link quality metric for each sector in the subscriber station's list; determining at the subscriber station a quality related to a reverse link quality metric for each sector in the subscriber station's list (see claims 1-4), and directing communication between the subscriber station and one sector from the sectors in the subscriber station's list in accordance with said determined forward link quality metrics and said determined qualities related to a reverse link quality metric (see claims 1-4), wherein said directing communication between the subscriber station and one sector from the sectors in the subscriber station's list in accordance with said determined forward link quality metrics and said determined qualities related to a reverse link quality metric comprises: assigning credits to each sector in the subscriber station's list except a current serving sector in accordance with said determined forward link quality metrics and said determined qualities related to a reverse link quality metric (see claims 1-4), and directing communication between the subscriber station and one sector from the sectors in the subscriber station's list in accordance with said assigned credits, wherein said assigning credits to each sector in the subscriber station's list except a current

serving sector in accordance with said determined forward link quality metrics and said determined qualities related to a reverse link quality metric comprises: comparing a forward link quality metric for a non-serving sector with a forward link quality metric for the current serving sector modified by a first threshold (see claim 3), comparing a quality related to a reverse link quality metric of the non-serving sector with a second threshold (see claim 3), comparing a quality related to a reverse link quality metric of the current serving sector with the second threshold (see claim 3), and determining whether to increase or decrease credits of the non-serving sector in accordance with results of said comparisons (see claims 1-4).

Regarding claims 2 and 17, Attar further teaches the data communication system comprises a wireless data communication system (see claims 1-4).

Regarding claims 3, 4, 5, 18, 19 and 20, Attar further teaches determining at the subscriber station a quality metric of a forward link for each sector in the subscriber station's list comprises measuring a signal-to-noise-and-interference-ratio of the forward link (see claims 1-4).

Regarding claim 6, Attar further teaches ascertaining at the subscriber station a first signal value at a position in a first channel of the forward link for each sector in the subscriber station's list; and processing at the subscriber station said ascertained first signal value for the each sector in the subscriber station's list (see claims 1-4).

Regarding claims 7 and 21, Attar further teaches ascertaining at the subscriber station a first signal value at a position in a first channel of the forward link for each sector in the subscriber station's list comprises ascertaining at the subscriber station a

reverse power control bit at a reverse power control channel of the forward link for each sector in the subscriber station's list (see claims 1-4).

Regarding claim 8, Attar further teaches processing at the subscriber station said ascertained first signal value for each sector in the subscriber station's list comprises filtering said ascertained signal value by a filter with a pre-determined time constant (see claims 1-4).

Regarding claims 11 and 26, Attar further teaches determining whether to increase or decrease credits of the non-serving sector in accordance with results of said comparisons comprises: increasing credits of the non-serving sector by a first pre-determined amount if: the quality related to a reverse link quality metric of the non-serving sector is less than the second threshold and the quality related to a reverse link quality metric of the current serving sector is greater than the second threshold; or if: the quality related to a reverse link quality metric of the non-serving sector is less than the second threshold and the quality related to a reverse link quality metric of the current serving sector is less than the second threshold and the forward link quality metric for the non-serving sector is greater than the forward link quality metric for the current serving sector modified by the first threshold; and decreasing credits of the non-serving sector by a second pre-determined amount if: the forward link quality metric for the non-serving sector is less than the forward link quality metric for the current serving sector modified by a first threshold; or if: the quality related to a reverse link quality metric of the non-serving sector is greater than the second threshold (see claims 1-4).

Regarding claims 12, 13 and 14, Attar further teaches directing communication

Art Unit: 2617

between the subscriber station and one sector from the sectors in the subscriber station's list in accordance with said assigned credits comprises: determining sectors with said assigned credits greater than a third threshold; and directing communication to a sector from said determined sectors with the highest of said assigned credits (see claims 1-4).

Regarding claim 15, Attar further teaches remaining in communication with the current serving sector otherwise (see claims 1-4).

Regarding claim 22, Attar further teaches the processor is configured to ascertain at the subscriber station a first signal value at a position in a first channel of the forward link for each sector in the subscriber station's list by executing a set of instructions to ascertain at the subscriber station a reverse power control bit at a reverse power control channel of the forward link for each sector in the subscriber station's list (see claims 1-4).

Regarding claims 23, Attar further teaches the processor is configured to process at the subscriber station said ascertained first signal value for each sector in the subscriber station's list by executing a set of instructions to filter said ascertained signal value by a filter with a pre-determined time constant (see claims 1-4).

Regarding claims 27, 28 and 29, Attar further teaches the processor is configured to direct communication between the subscriber station and one sector from the sectors in the subscriber station's list in accordance with said assigned credits by executing a set of instructions to: determine sectors with said assigned credits greater than a third threshold; and direct communication to a sector from said determined

sectors with the highest of said assigned credits (see claims 1-4).

Regarding claim 30, Attar further teaches the set of instructions executable by the processor to further comprises a set of instructions to remain in communication with the current serving sector otherwise (see claims 1-4).

This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi H. Ly whose telephone number is (571) 272-7911. The examiner can normally be reached on 8:30 am-5:30 pm Monday-Friday.

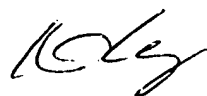
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

Art Unit: 2617

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nghi H. Ly



CHARLES APPIAH
PRIMARY EXAMINER